

**SUMMARY OF HYDROLOGIC CONDITIONS
IN THE
UPPER DELAWARE RIVER BASIN
March 2002**

Prepared by the
Office of the Delaware River Master
Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during March was deficient. The maximum daily mean discharge of 14,200 cfs occurred on March 28. The minimum daily mean discharge was 2,080 cfs on March 2.

On the basis of a 5-station average, precipitation during March was 3.47 inches, which is 104 percent of the 61-year average. The maximum daily-average precipitation during March was 1.21 inches on March 27. Precipitation in the upper Delaware River Basin during the past 12 months was 12.16 inches less than the long-term average. Precipitation during March was 0.12 inches more than the long-term average for the month.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during March was 3,969 cfs, which is 43 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 6,567 cfs, or 56 percent of median (water years 1961-90).

Combined storage April 1, 2002 in Pepacton, Cannonsville, and Neversink Reservoirs was 50 percent of capacity above the point of maximum depletion. The combined storage of 136 billion gallons was 29 billion gallons more than that of one month ago and 106 billion gallons less than that of one year ago. Median storage on the first day of April in 34 years of record is 253 billion gallons. On the basis of reservoir storage, the river basin entered drought on December 1, 2001. **The combined storage on April 1, 2002, was the lowest of record for the first day of April.**

As part of a statewide network, the USGS operates 13 observation wells in the Pennsylvania part of the Delaware River Basin. Mean water levels during March were below average in 12 of the wells. Water levels in 6 of the wells were trending downward in comparison to February levels, and water levels in 12 of the wells were below March 2001 levels.

HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to Mar. 2001		April 2001 to March 2002					
	Average		Actual		Percent of average		Excess (+) or deficit (-)	
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative
Apr.	3.77	43.28	1.35	31.12	36	72	-2.42	-12.16
May	4.21	39.51	3.08	29.77	73	75	-1.13	-9.74
June	3.96	35.30	4.06	26.69	103	76	+1.10	-8.61
July	4.09	31.34	2.49	22.63	61	72	-1.60	-8.71
Aug.	3.85	27.25	2.84	20.14	74	74	-1.01	-7.11
Sept.	3.83	23.40	5.37	17.30	140	74	+1.54	-6.10
Oct.	3.38	19.57	1.28	11.93	38	61	-2.10	-7.64
Nov.	3.83	16.19	*1.37	10.65	36	66	-2.46	-5.54
Dec.	3.36	12.36	2.71	9.28	81	75	-.65	-3.08
Jan.	3.00	9.00	1.69	6.57	56	73	-1.31	-2.43
Feb.	2.65	6.00	1.41	4.88	53	81	-1.24	-1.12
Mar.	3.35	3.35	3.47	3.47	104	104	+.12	+.12

Note: Amount shown in cumulative columns is total from month shown to present.

* Revised since last month.

STREAMFLOW, IN CFS DELAWARE RIVER AT MONTAGUE, N.J.

Month	1940-2000			2002 Monthly mean	Percent of median
	Maximum	Median	Minimum		
March (observed)	24,480 (1945)	9,168	3,191 (1981)	3,969	43
March (adjusted)	25,910 (1945)	11,220	4,428 (1981)	6,567	59
April (observed)	31,560 (1940)	11,640	3,322 (1985)		
April (adjusted)	33,010 (1940)	13,840	3,847 (1946)		